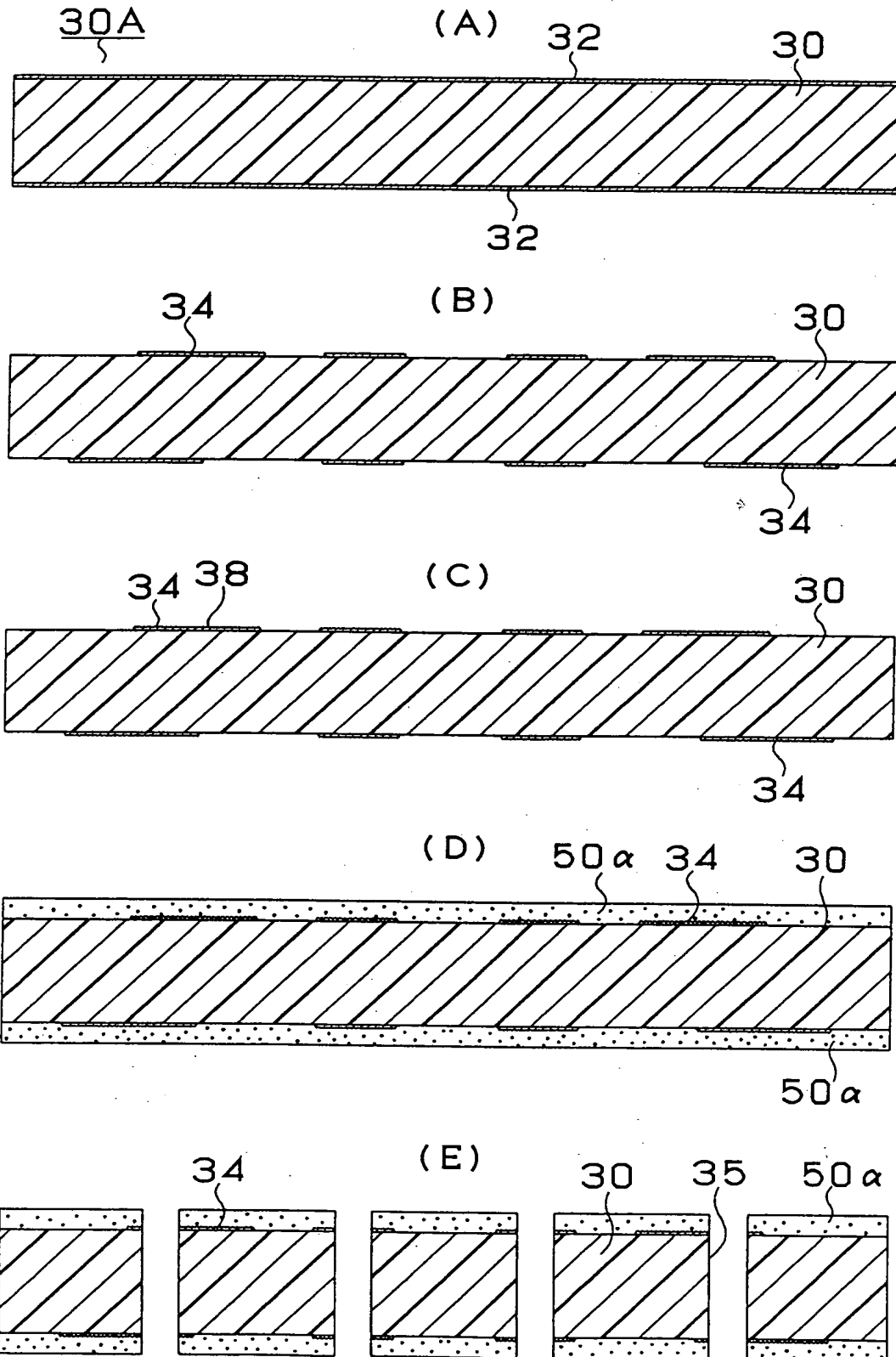
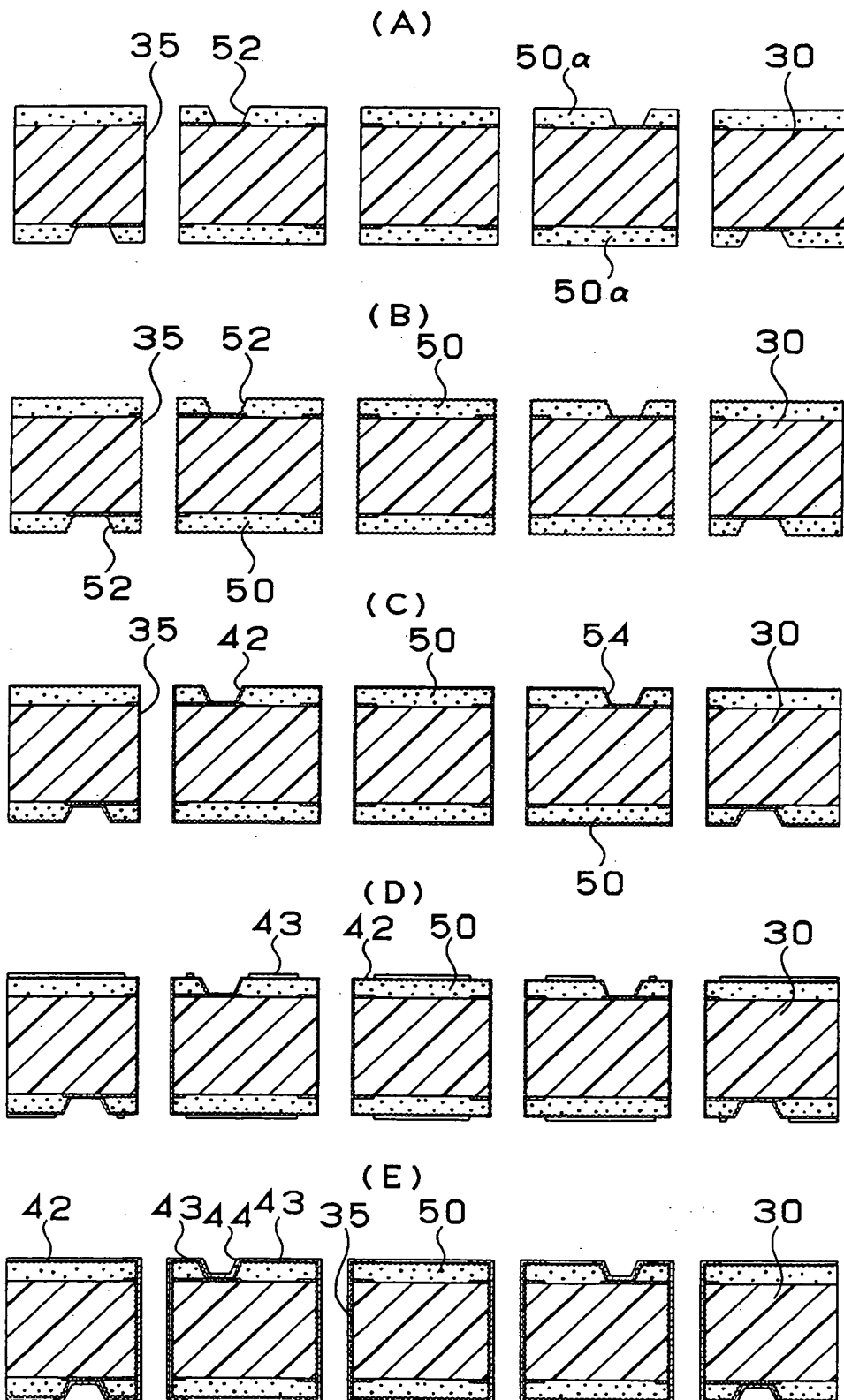


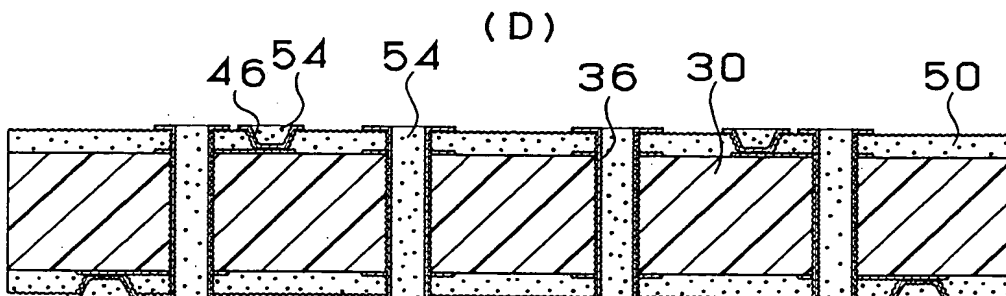
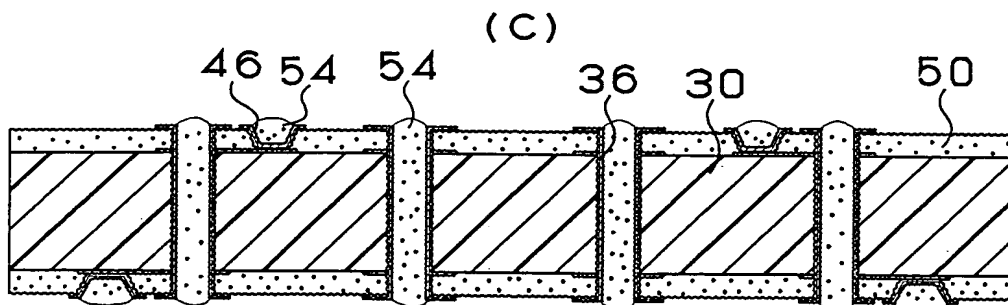
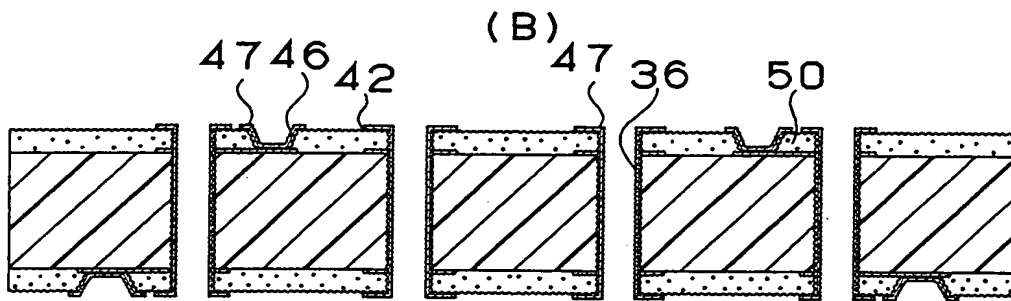
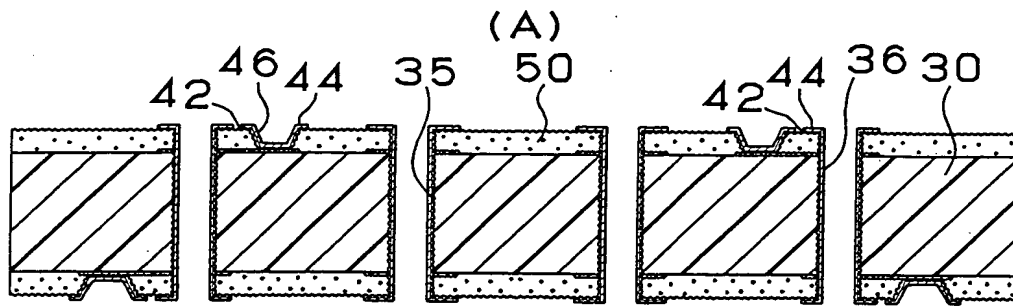
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Fig. 1



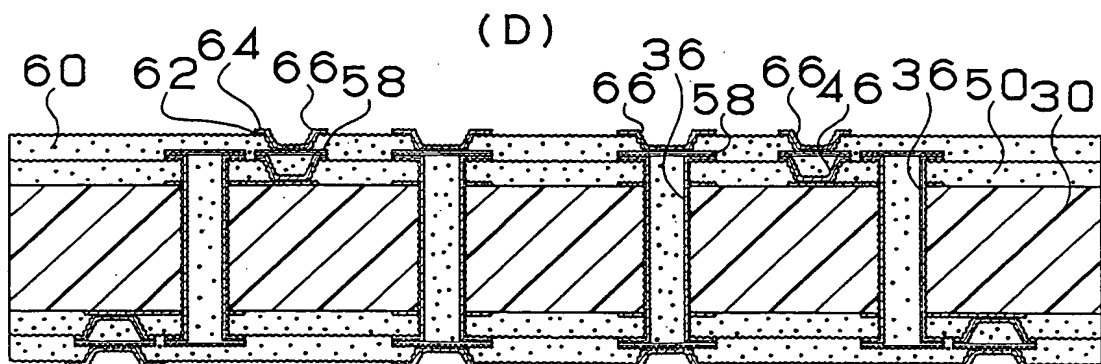
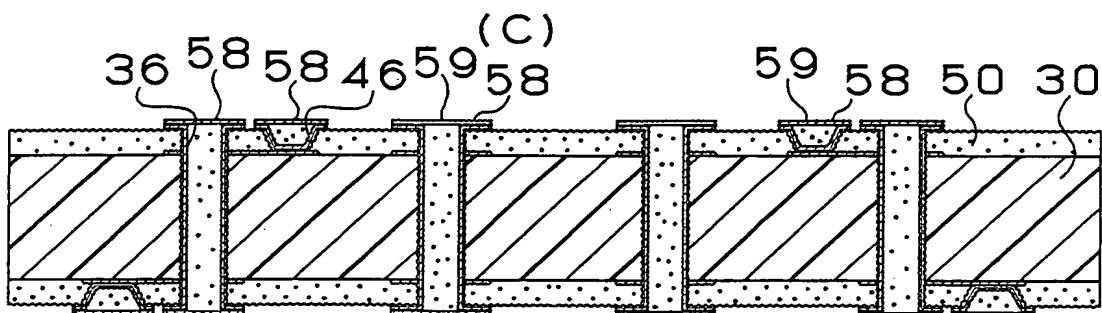
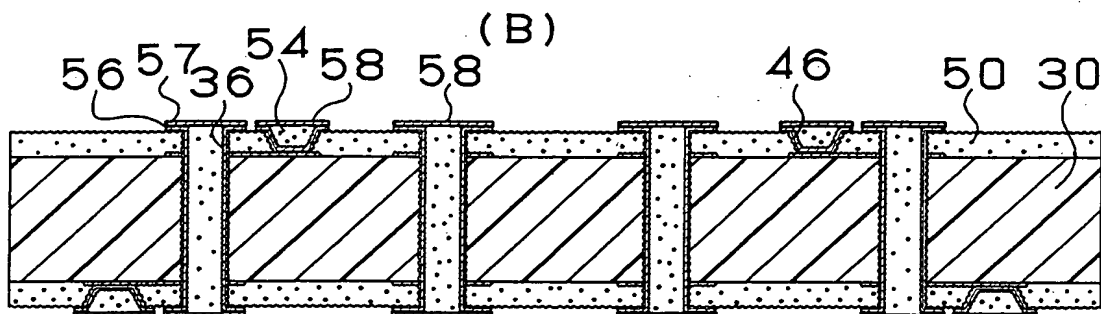
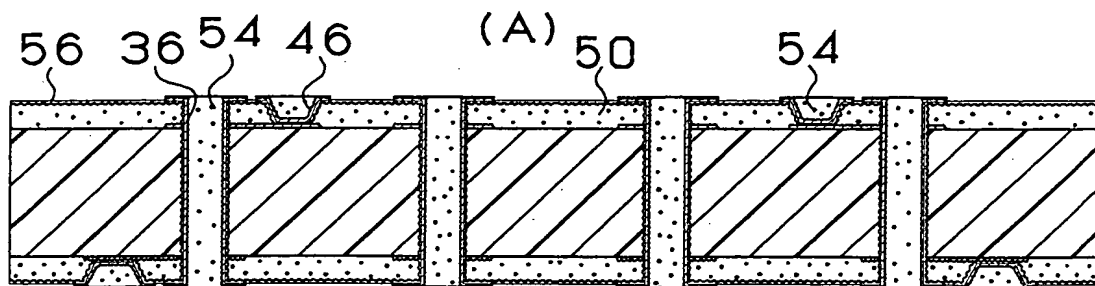
LOOK AT
PAGE 6

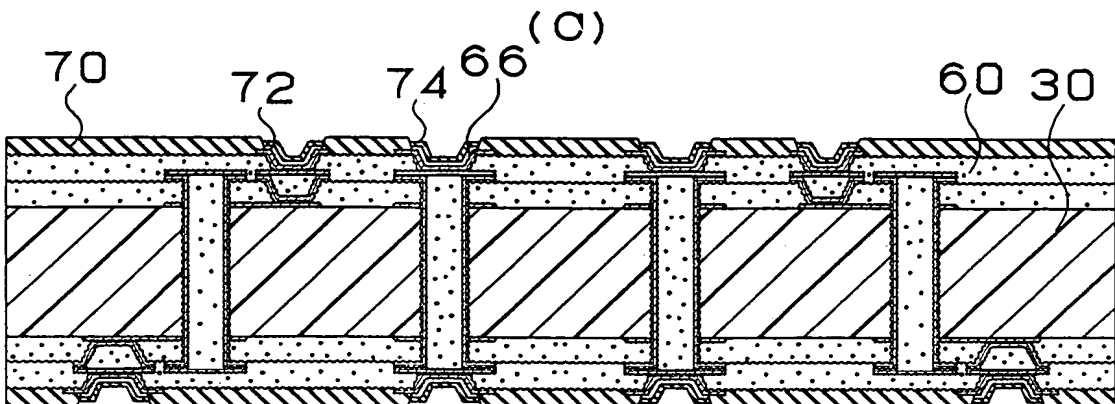
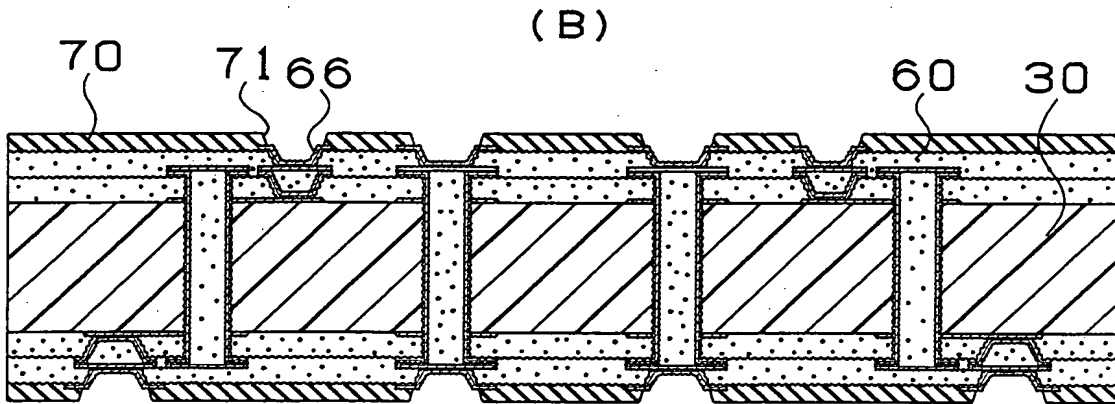
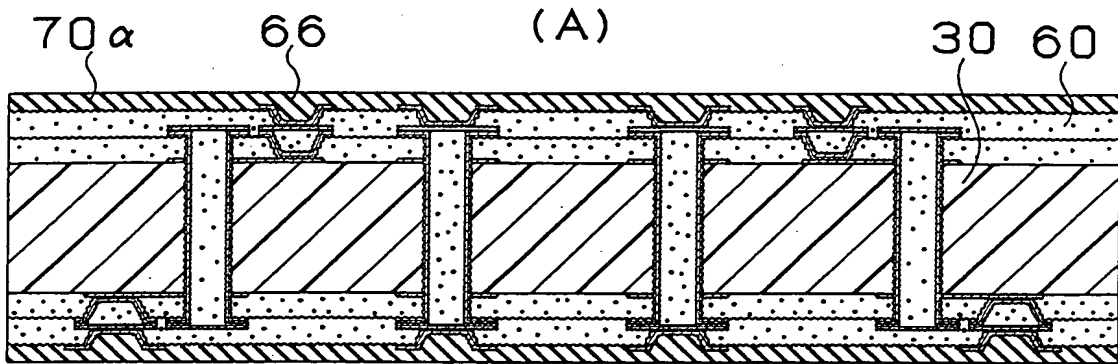
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Fig. 2

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Fig. 3

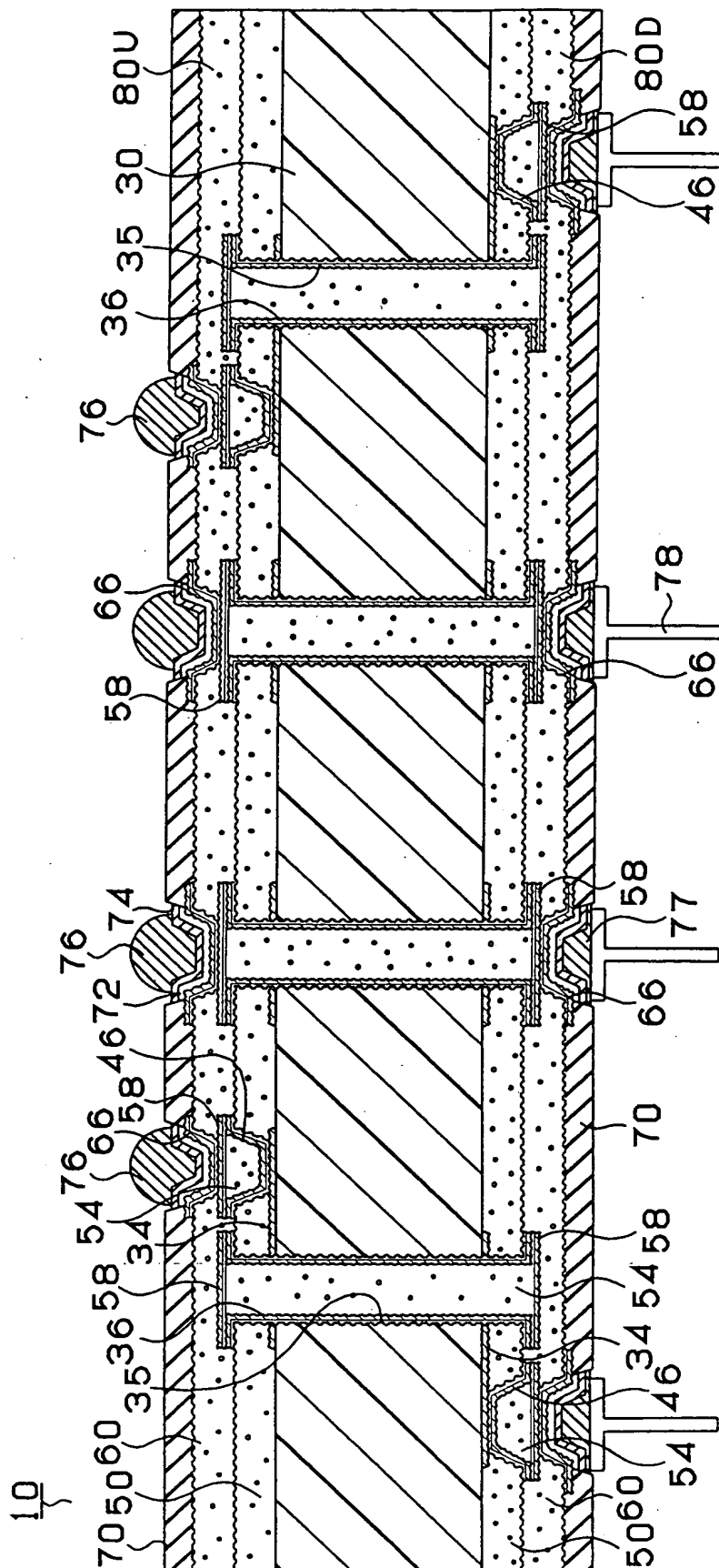


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Fig. 4



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Fig. 5

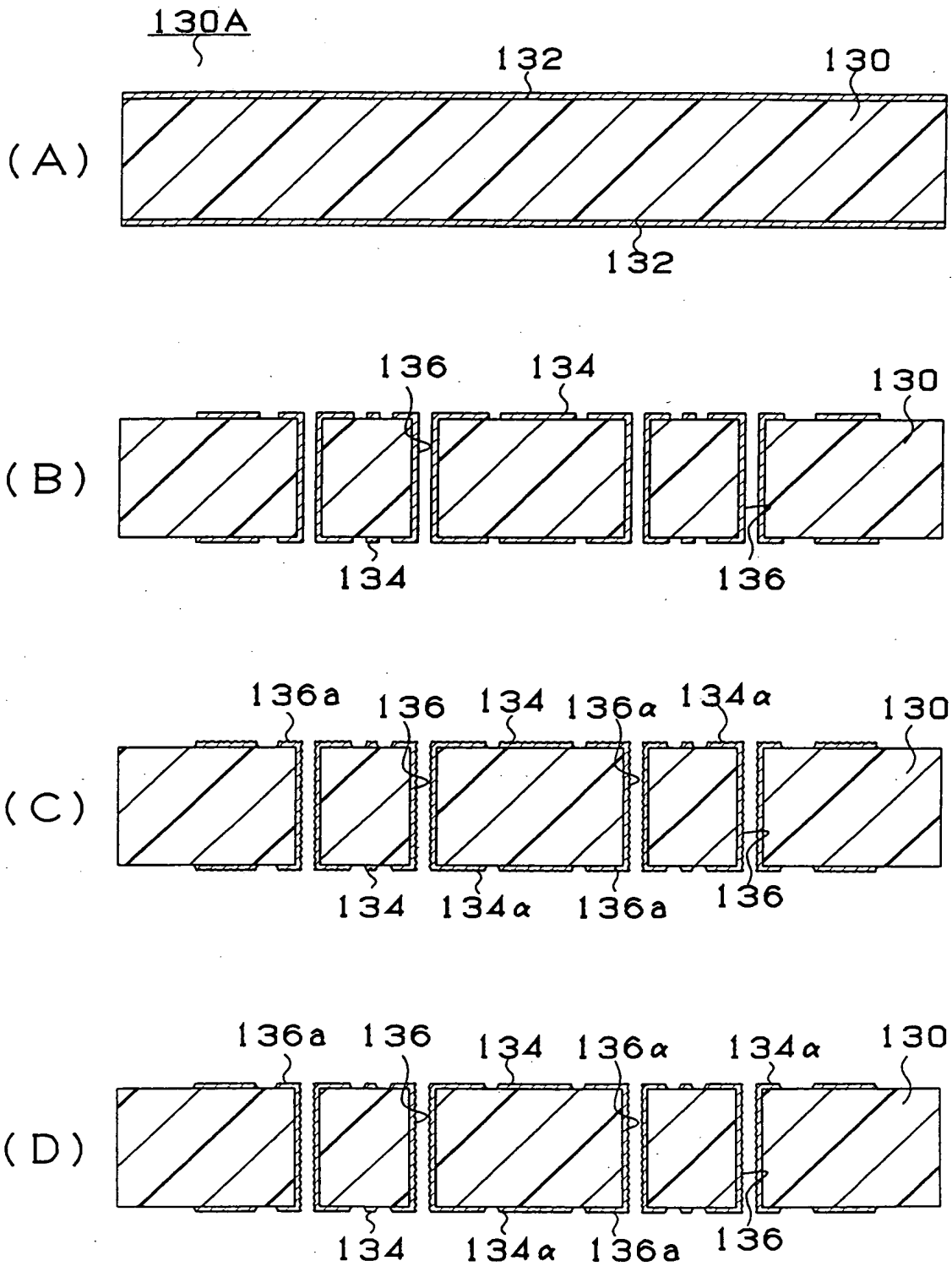
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Fig. 6

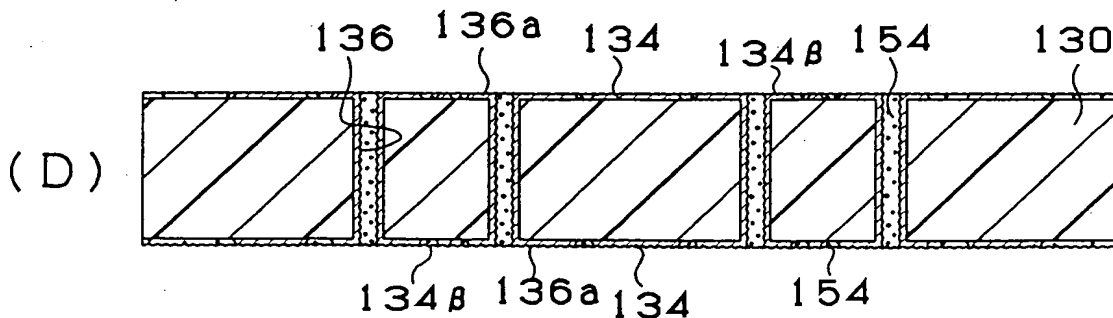
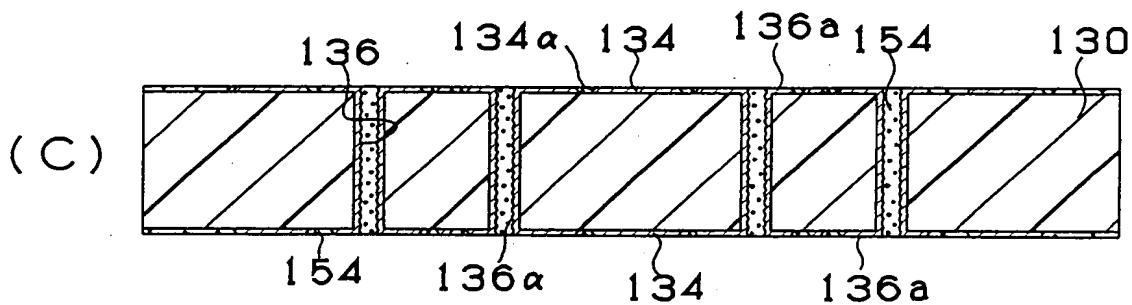
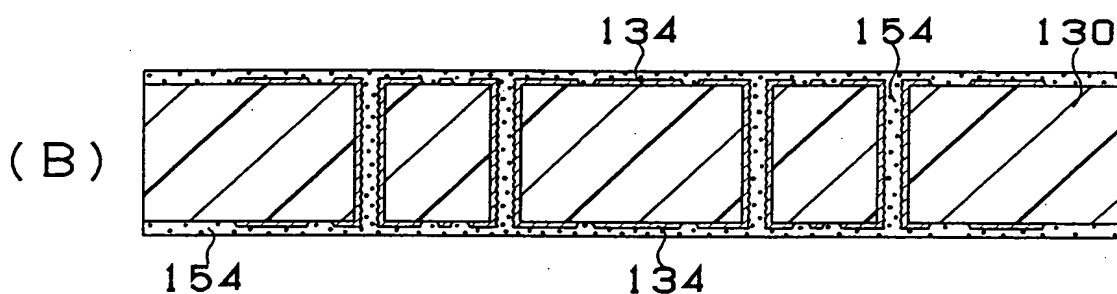
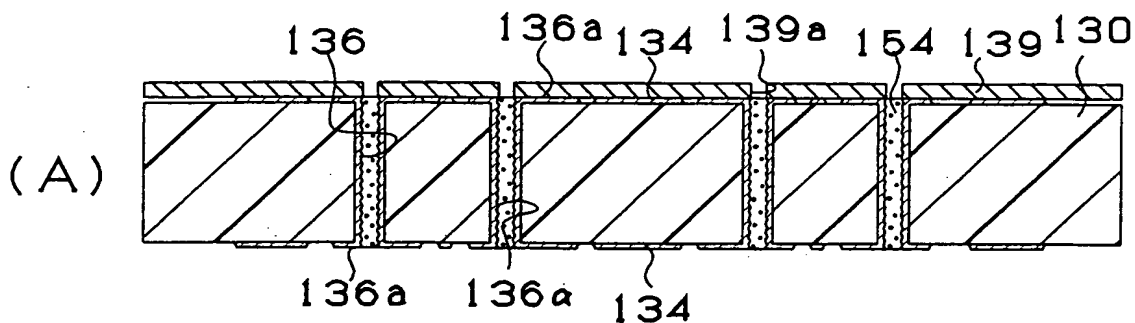


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F i g. 7

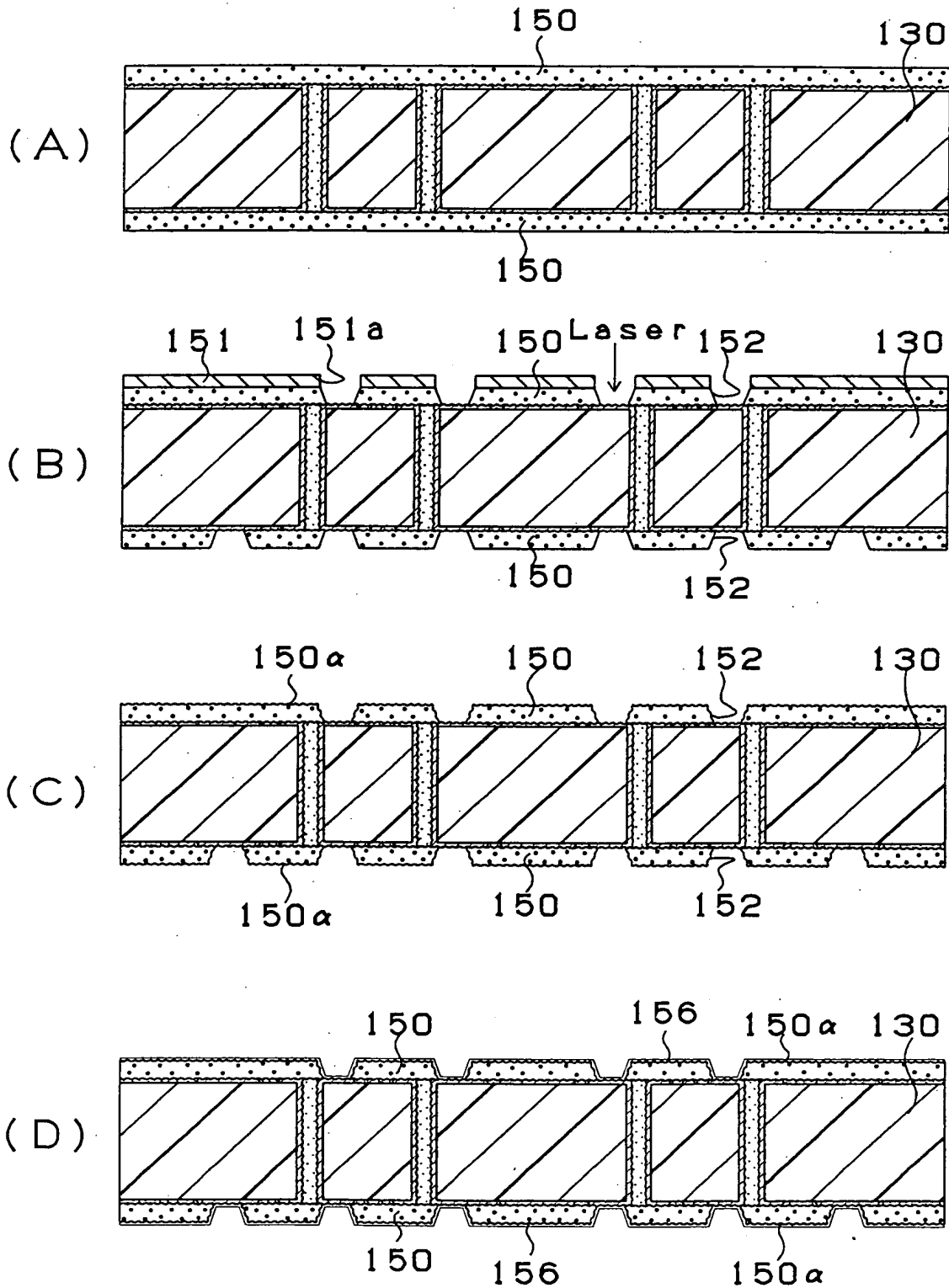
	Embodiment	Comparison Example
Electrical connection characteristic	OK	NG
Separation	NO	YES
Expansion	NO	YES

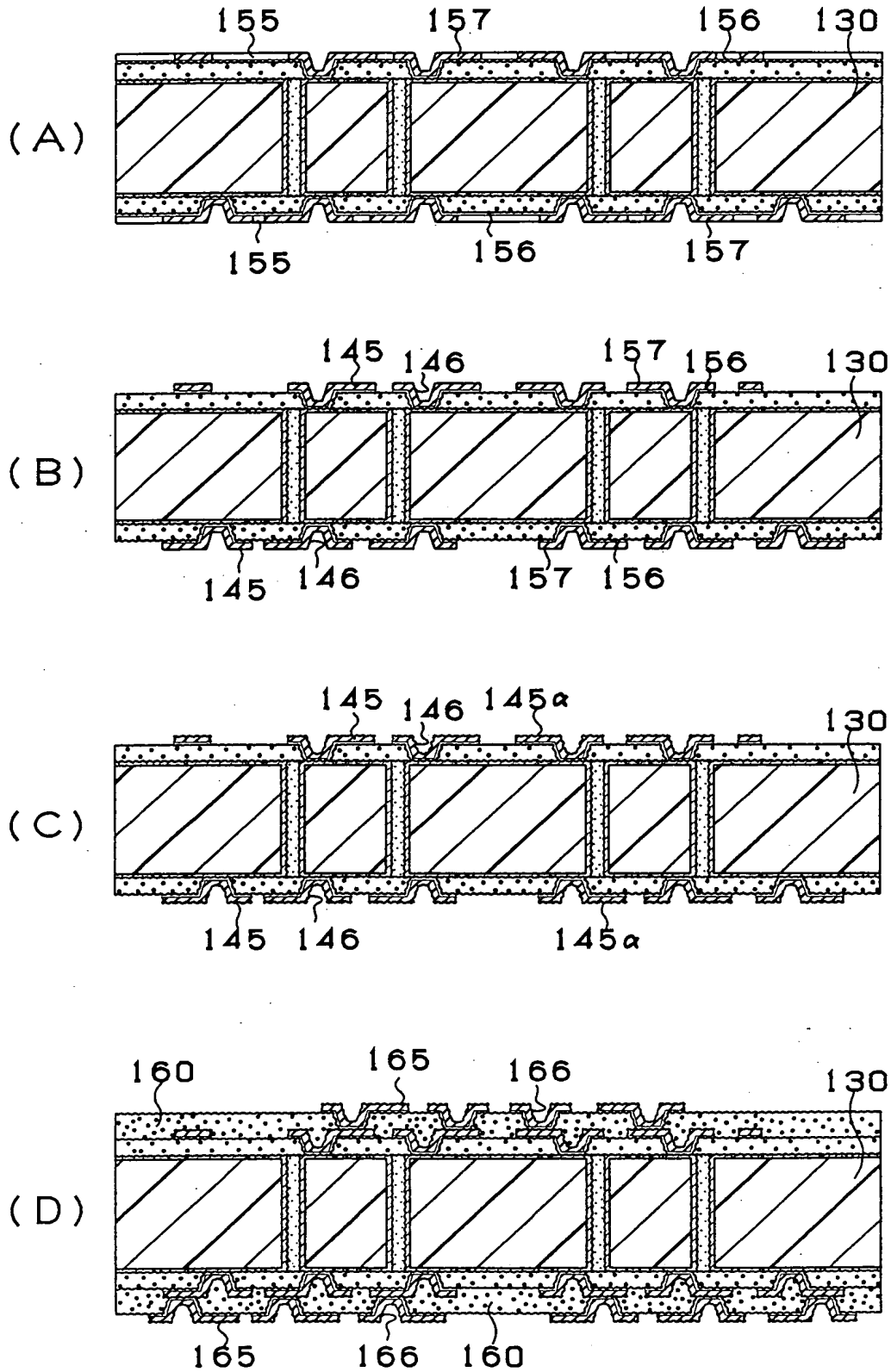
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Fig. 8



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Fig. 9

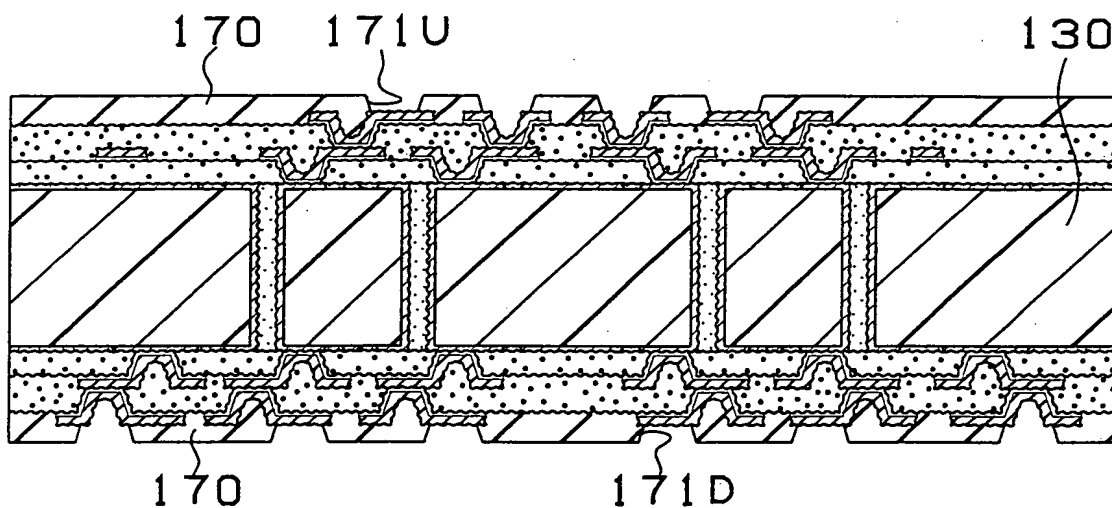
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Fig. 10



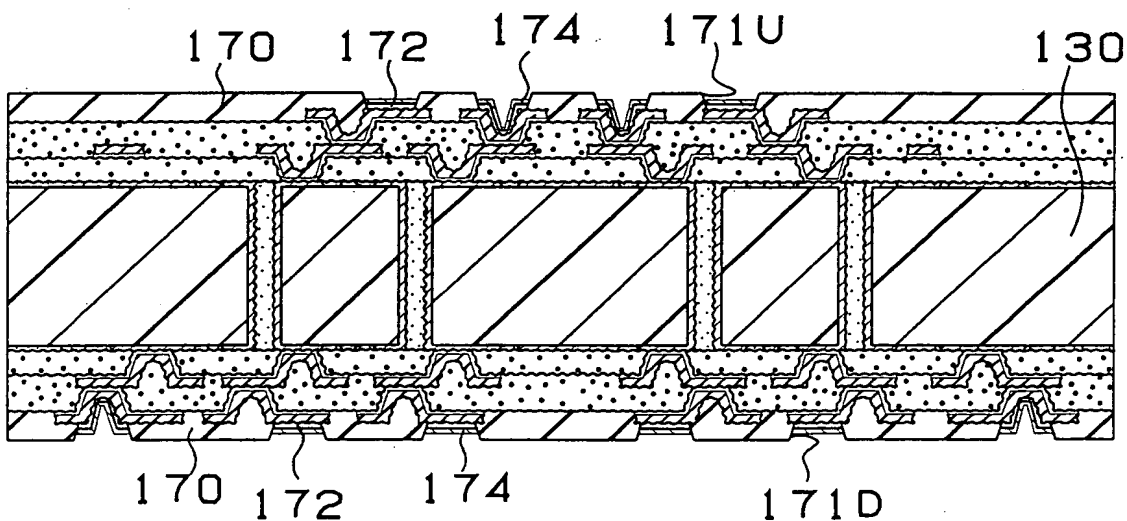
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Fig. 11

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Fig. 12

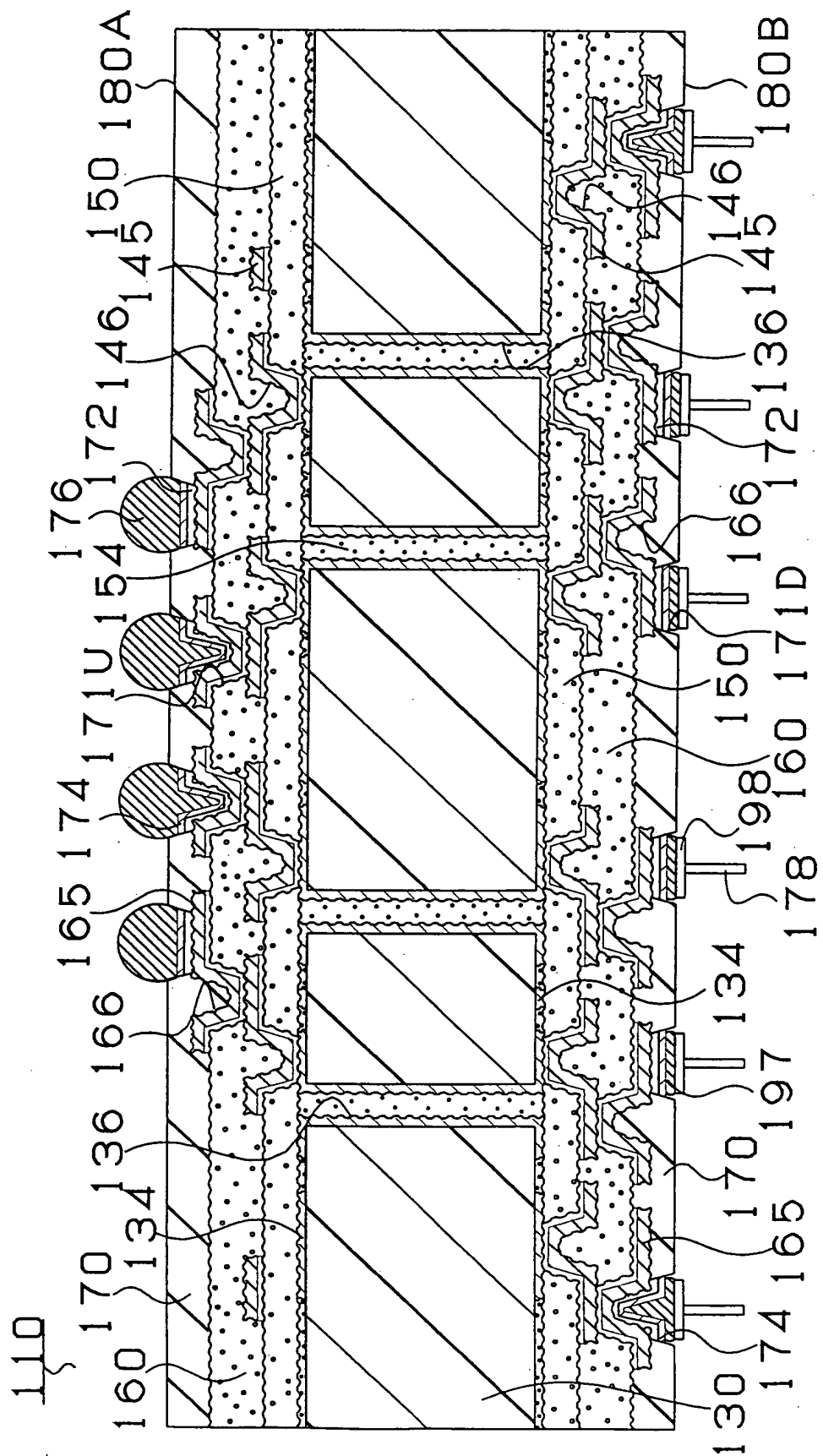
(A)



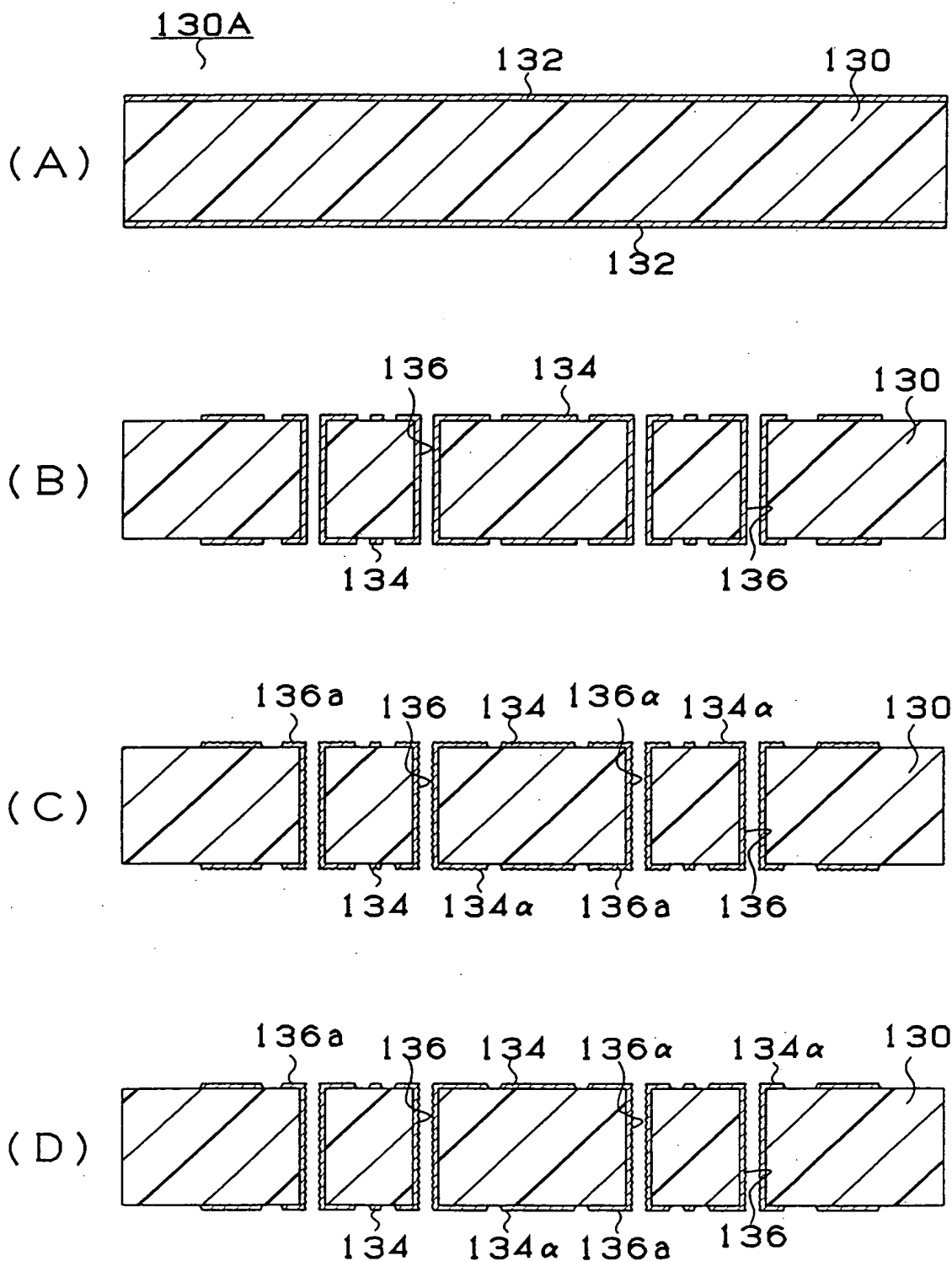
(B)



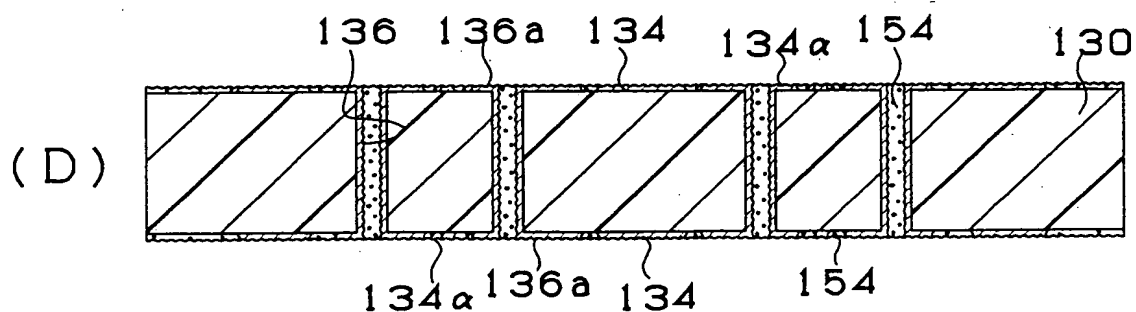
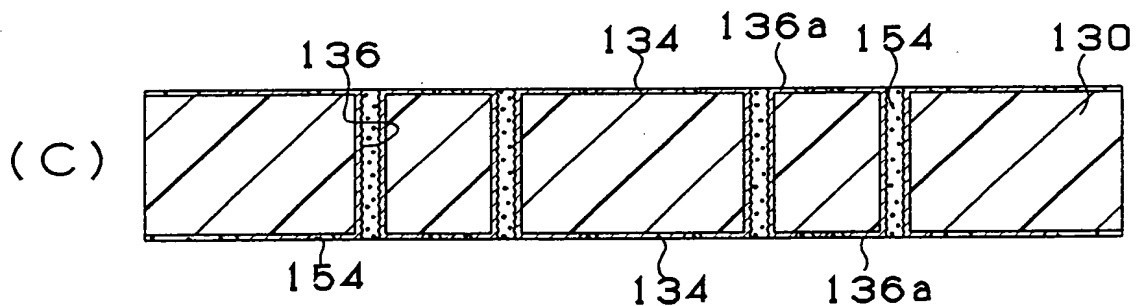
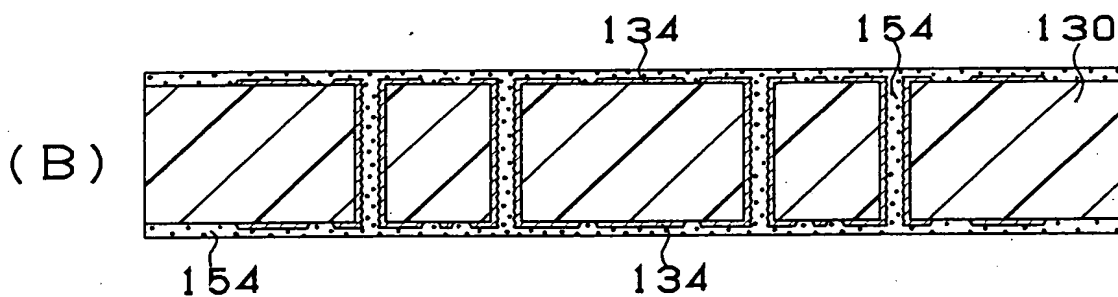
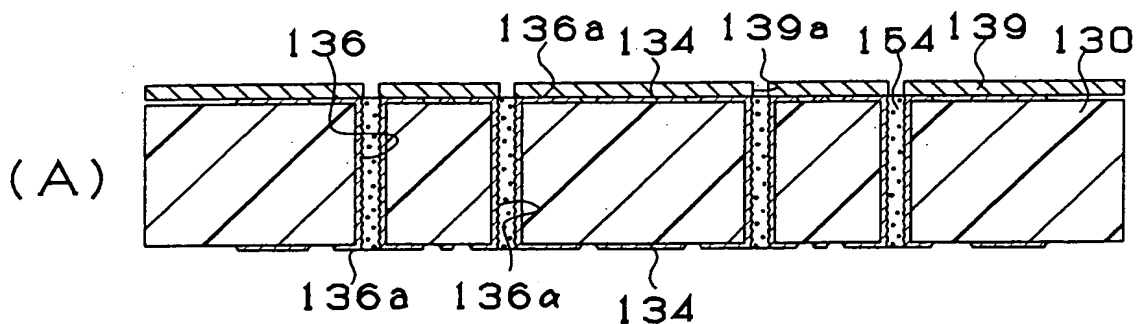
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Fig. 13



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Fig. 14



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Fig. 15



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Fig. 16

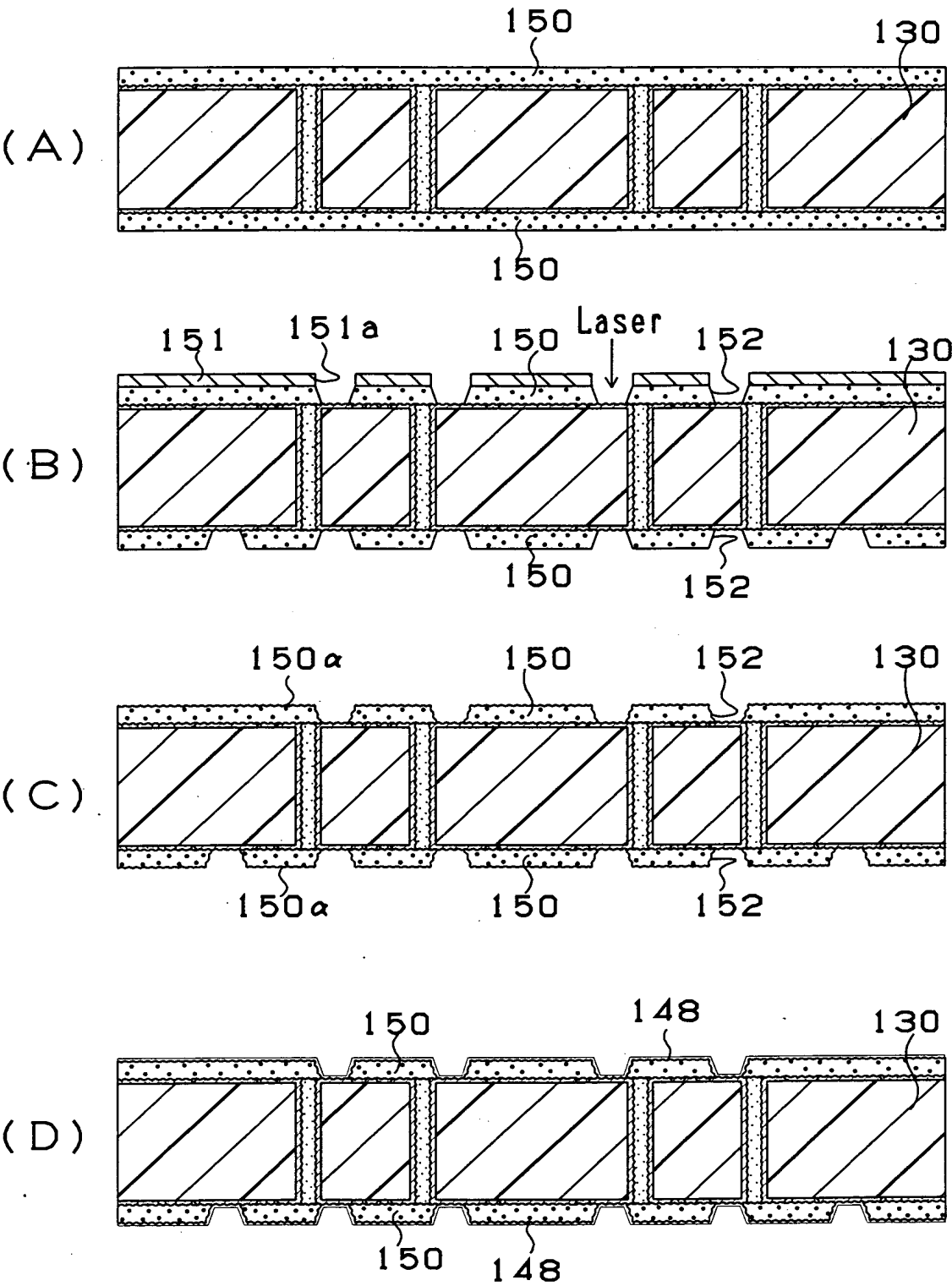
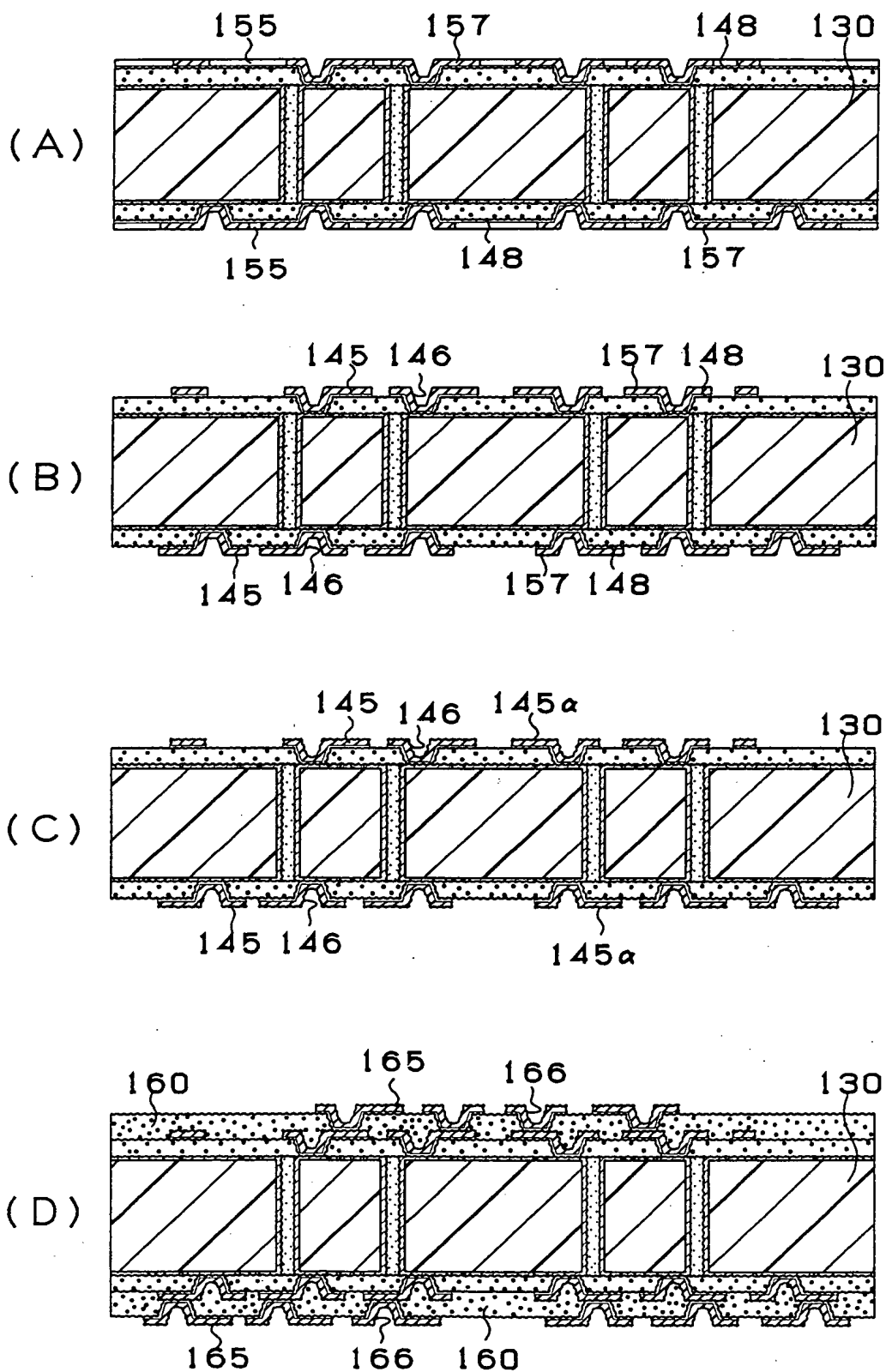
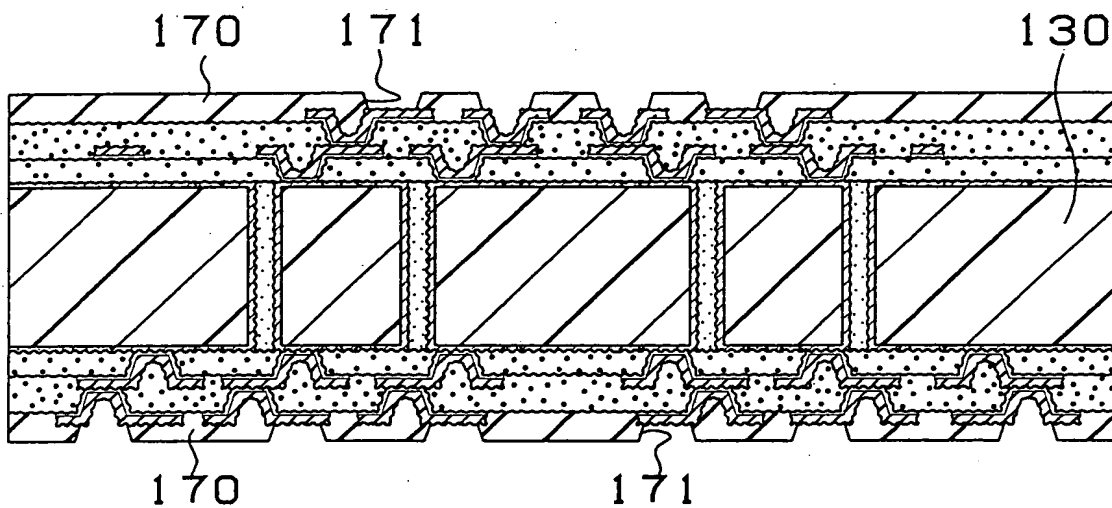


FIG. 16

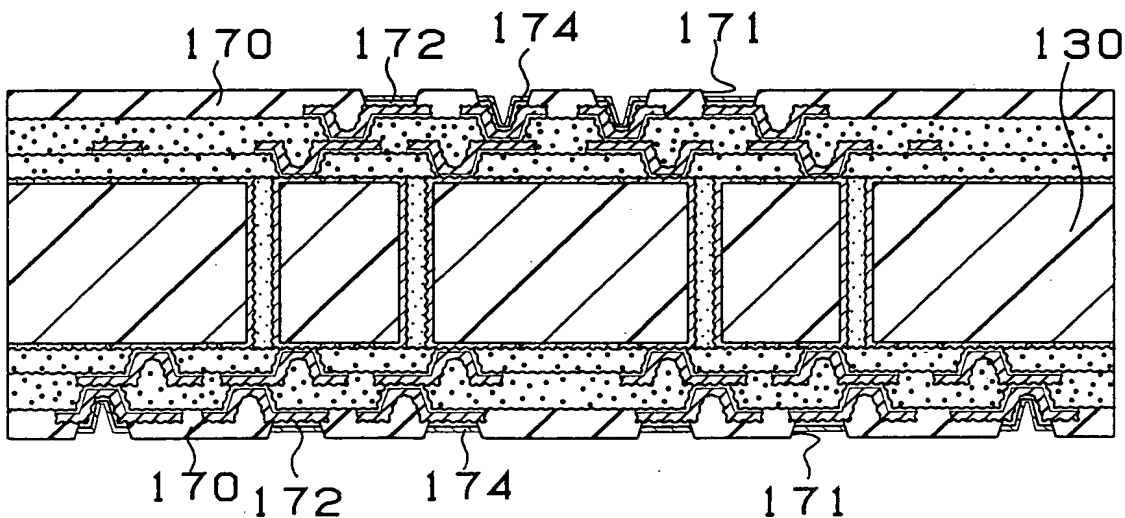
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Fig. 17

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Fig. 18

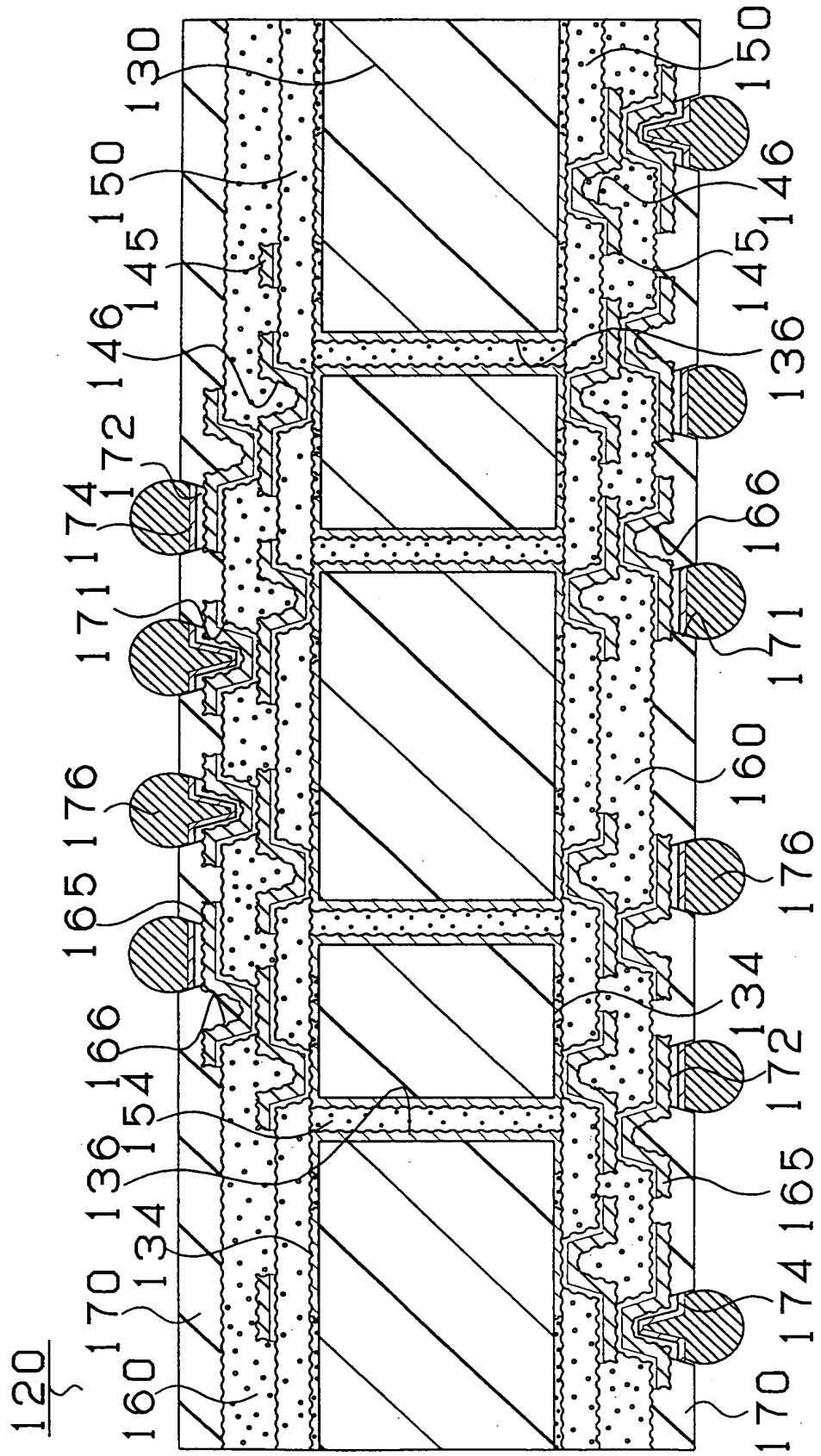
(A)



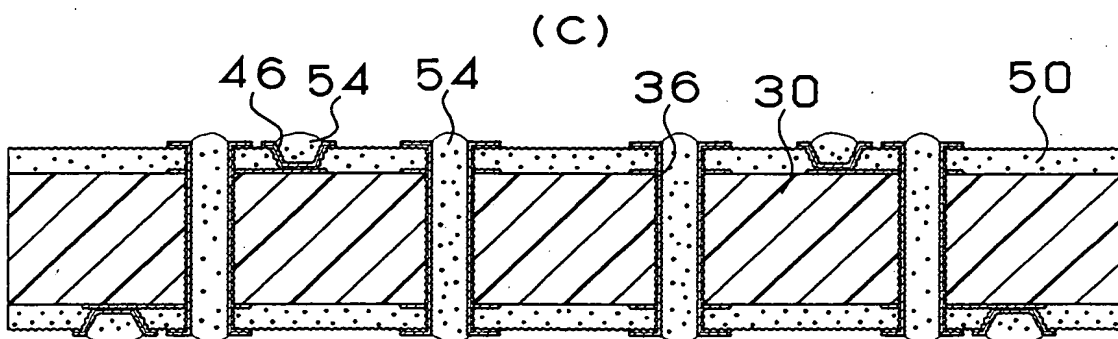
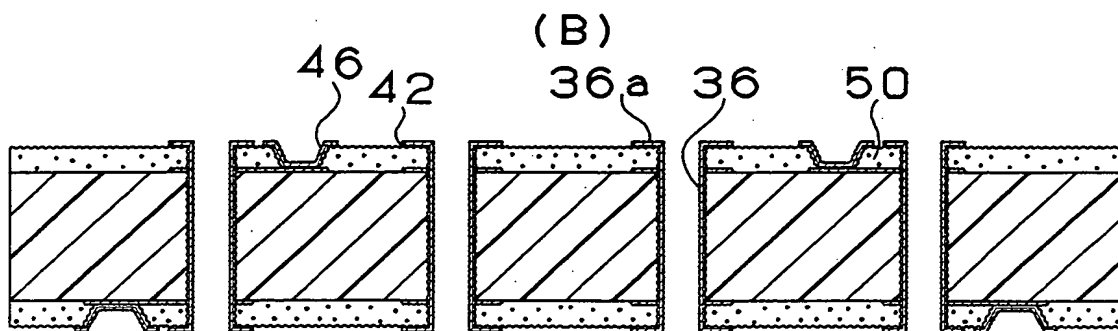
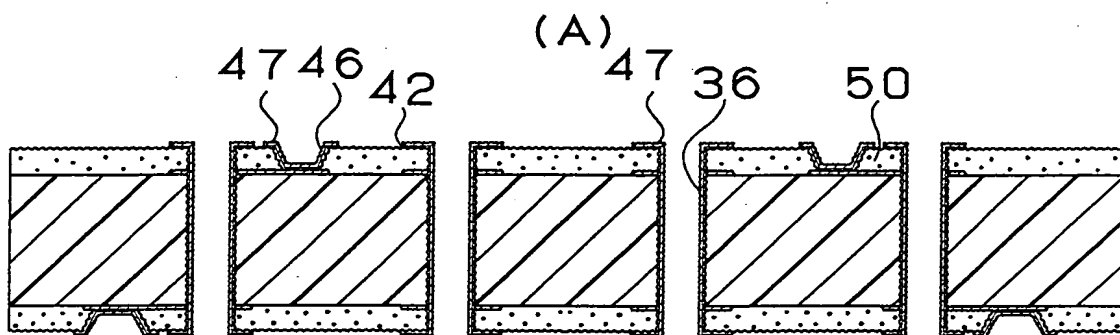
(B)



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Fig. 19



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Fig. 20



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Fig. 21

	roughing method	polishing of through hole land surface	flow of resin filler out of through holes
Comparison example 5	blackening- reduction process	No	Yes
Comparison example 6	etching	No	Yes
Comparison example 7	electroless plating	No	Yes
Second Embodiment	blackening- reduction process	Yes	No
First Modification of Second Embodiment	etching	Yes	No
Second Modification of Second Embodiment	electroless plating	yes	No

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Fig. 22

